

State of Hawaii
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Aquatic Resources
Honolulu, Hawaii 96813

June 9, 2006

Board of Land and
Natural Resources
Honolulu, Hawaii

REQUEST FOR APPROVAL TO ENTER INTO A DLNR/UH CONTRACT TO DEVELOP
TOOLS TO ASSESS LAND BASED POLLUTION IMPACTS IN CORALS (\$119,998) TO
BE CONDUCTED FROM JUNE 1, 2006 THROUGH MAY 31, 2008

Submitted herewith for your consideration is a request to enter into a Contract for Professional Services between the Department of Land and Natural Resources and the University of Hawaii. The Contract runs from June 1, 2006 through May 31, 2008, and funds the project titled "Developing Tools for Assessing Land Based Pollution Impacts in Corals" (Principal Investigator Dr. Ruth D. Gates, Hawaii Institute of Marine Biology). The Contract is for \$119,998 and is fully federally funded. Funding is provided by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Coral Reef Conservation Act.

This project supports research activities essential to the management of our coral reef resources. The goal is to explore the biological impacts of repeated and sporadic exposures to land based pollution on Hawaiian coral reefs. This work will characterize the quality and quantity of sediments and a range of co-occurring stressors in two ahupua'a in Hawaii, as well as provide a detailed understanding of how these exposures reflect the biology of coral across a range of temporal scales. The project will employ a multiscale, histological approach and biological methods to improve our understanding of sediment stress in corals. It will identify and field test a management relevant tool (or suite of tools) that has the potential to identify the correlation between land based sources of pollution and coral reef health.

The project will perform the following: 1) measure levels and define the nature of land based pollution at sampling stations on a near shore to offshore transect in two of three ahupua'a (Honolua, Maui; Kawela-Kaupualei, Molokai; and Hanalei, Kauai); 2) define the coral community composition at the sampling sites; 3) identify gene targets that are sensitive to and thus indicate exposure to land based pollution in corals; 4) characterize histological changes in coral tissues associated with exposure to land based pollution; and 5) analyze these data to identify the biological trait or traits that most tightly correlate with the levels of land based pollution exposure in the three ahupua'a.

RECOMMENDATION:

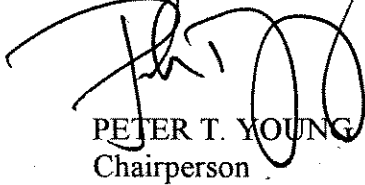
"That the Board authorizes the Chairperson to negotiate and, subject to necessary approvals, enter into a Contract with the University of Hawaii."

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Dan Polhemus", written in a cursive style.

DAN POLHEMUS
Administrator

APPROVED FOR SUBMITTAL:

A handwritten signature in black ink, appearing to read "Peter T. Young", written in a cursive style with a large loop at the end.

PETER T. YOUNG
Chairperson